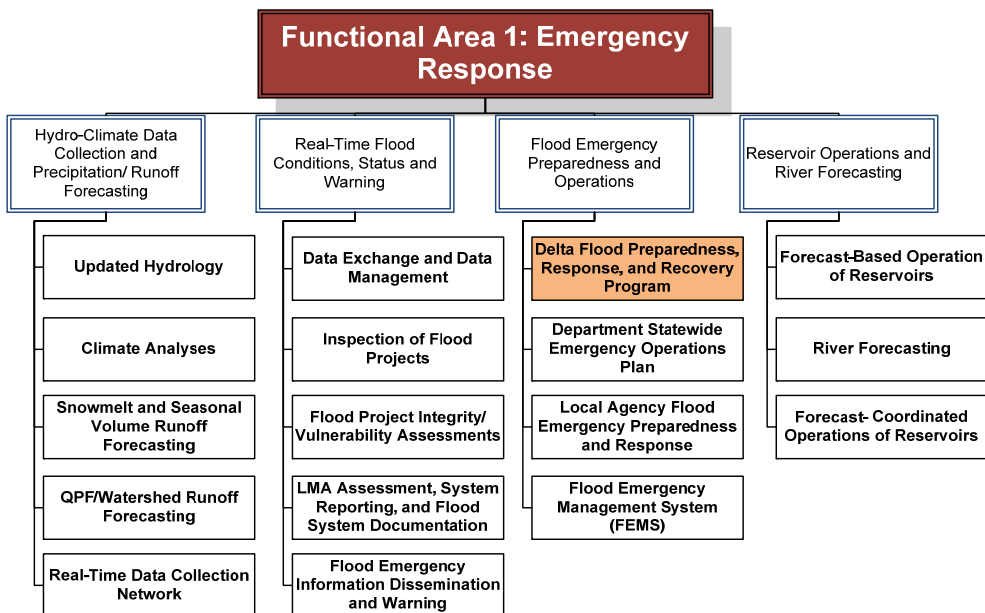


## DELTA FLOOD EMERGENCY PREPAREDNESS, RESPONSE, AND RECOVERY PROGRAM

Program Manager: William Croyle, Flood Operations Branch Chief

Project Manager: John Paasch, Regional Flood Preparedness Section Chief



- Objectives:
- Protect the lives, property, and infrastructure critical to the functioning of both the Delta and California.
  - Protect water quality and restore water supply for both Delta and export water users.
  - Reduce the recovery time of California's water supply to less than six months.
  - Minimize impacts on environmental resources.

This program is pursuant to SBX2-1: "...of the funds made available pursuant to the Disaster Preparedness and Flood Prevention Bond Act of 2006, \$135,000,000 to the Department of Water Resources for essential emergency preparedness supplies and projects..."

# DELTA FLOOD EMERGENCY PREPAREDNESS, RESPONSE, AND RECOVERY PROGRAM

## PARTNERS WORKING TOGETHER

The intent of this effort is to have a coordinated and effective multi-agency response during a large scale Delta flood emergency where DWR's activities work in concert with the flood emergency efforts of other local, State, and federal agencies within the Delta.

Hydrology and Flood Operations Office staff is regularly engaging other DWR staff across the department as well as Delta partners and State Water Project contractors to develop the Delta Flood Emergency Preparedness, Response, and Recovery Program (Delta ER) components:

- Developing analysis and evaluation tools
- Conduct informative studies
- Develop and plan ER facilities
- Drafting the Department wide Delta Flood Emergency Management Plan



Local / Regional Stakeholders	State	Federal
• Five County Operation Area Managers	• Cal OES (Cal EMA)	• USACE
• Local RDs and LDs	• CVFPB	• NOAA
• SWC, Public Utilities	• Delta Stewardship Council	• CNRFC
• Delta Protection Commission	• California Coast Guard	• FEMA
	• State Parks and Recreation	• USBR
	• DWR: O&M, Executive	• National Guard

### ➤ DELTA WORKING GROUP

Quarterly meetings are held throughout the Delta region with the five Delta counties, CalEMA, and DWR as lead participants to coordinate planning activities and to understand the different roles and responsibilities during a catastrophic flood event in the Delta.

**STATUS:** The next Delta Working Group meeting will be June 19<sup>th</sup> hosted by Yolo County OES. This meeting, focusing on cost recovery, will conclude a 3-part Table Top Exercise by Delta emergency responders.

### ➤ SB 27 TASK FORCE

As directed by the Sacramento – San Joaquin Delta Emergency Preparedness Act of 2008, specific recommendations and strategies for emergency preparedness and response were developed for the Governor and Legislature.

**STATUS:** Report completed January 2012. Support and implementation of recommendations ongoing. Referenced as recommendations of DTSC, Delta Plan.

### ➤ FEMA – CALEMA

Support CalEMA and FEMA in development of an MOU regarding FEMA public assistance for non-Project levees in the Delta.

**STATUS:** Comments on draft MOU provided to CalEMA.

## ANALYSES AND EVALUATION TOOLS

HAFOO is developing the in-house capability to model water quality and delivery impacts of emergency response actions. This effort utilizes the Emergency Response and Recovery module (ERR) and the Water Analysis Module (WAM) used previously for the Delta Risk Management Study (DRMS). The ERR models emergency response and recovery actions in a "damaged" delta. The WAM takes the output from the ERR and models the water quality response to the emergency response and recovery actions. An ERR/WAM interactive workshop was held November 29-30 and included participants from DFM-HAFOO, FESSRO, Bay-Delta Office, and the SWP-Operations Control Office. Sub-Consultant contract is executed.

**STATUS:** Tool development and migration to DWR programs to be completed May 2013.

## DELTA FLOOD ER STUDIES

The Program components are supported through several studies.

### ➤ JONES TRACT CASE STUDY

This study provides background to guide the development of policy to clarify DWR's role and level of involvement in multi-stakeholder emergency response and recovery efforts on non-project levees in the Delta.

**STATUS:** To be completed May 2013.

### ➤ DELTA FLOOD EMERGENCY RESPONSE AND RECOVERY – TECHNICAL REPORT

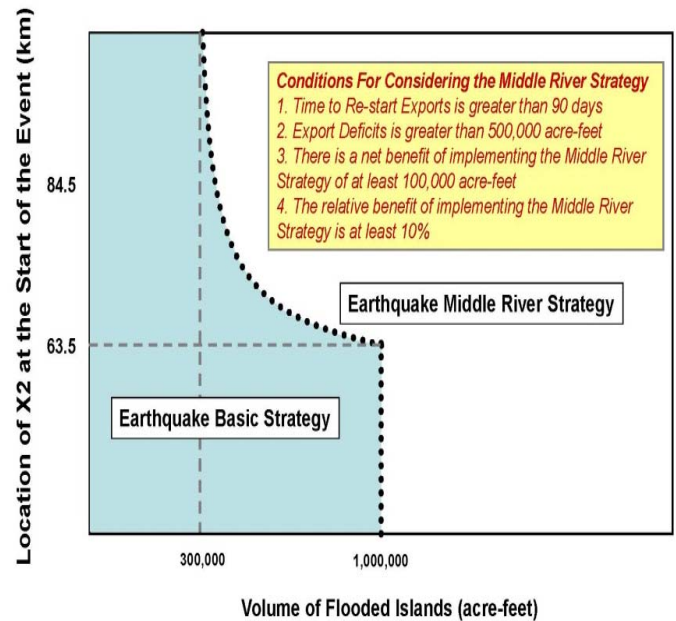
This study evaluated the severity of levee breaches to inform response and recovery strategies and the development of the Delta ER Plan. Severity is described in terms of water quality impacts and disruption to CVP and SWP facilities and the cost and duration of likely levee repairs and island dewatering.

**STATUS:** Completed November 2011.

### ➤ DELTA EMERGENCY CHANNEL CLOSURE LOCATIONS STUDY

This study evaluated site conditions, material quantities, and construction costs of potential barriers installed during flood emergencies. This study did not determine when barriers would be implemented, but describes alternative costs and schedules.

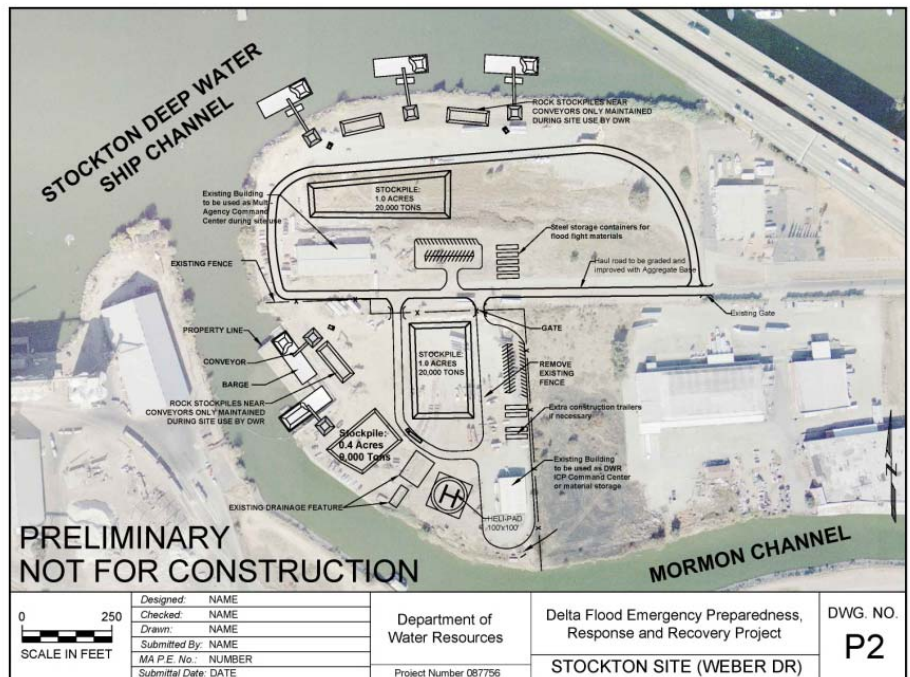
**STATUS:** Completed April 2012.



## EMERGENCY RESPONSE FACILITIES

The purpose of the Facilities Implementation Project is to provide DWR with the physical resources to quickly respond to and recover from catastrophic levee failures in the Delta. Major components of this effort include:

- Site acquisition and construction
- Environmental impact assessments
- Operational readiness



## EMERGENCY RESPONSE FACILITIES (CONT.)

### ➤ ACQUISITION AND CONSTRUCTION

Three locations have been identified to store Delta ER materials. They include CVFPB land at Rio Vista, private land near the Stockton Port, and within Brannan Island State Park. An existing lease site at the Port of Stockton on Rough and Ready is not part of the long term plan.

**STATUS:** Agreements are being developed for the Rio Vista site with the CVFPB and for Brennan Island with State Parks and Recreation. 6-month interim lease signed for the metal warehouse and 3-acres on the site near the Stockton Port. The Port of Stockton R&R lease has been extended thru October 2013.

### ➤ ENVIRONMENTAL IMPACTS

In general, impacts are less than significant with some onsite mitigation incorporated.

**STATUS:** Public comment period for Initial Study – Mitigated Negative Declaration closed May 10, 2013. Notice of Determination expected end of May 2013.

### ➤ OPERATIONAL READINESS

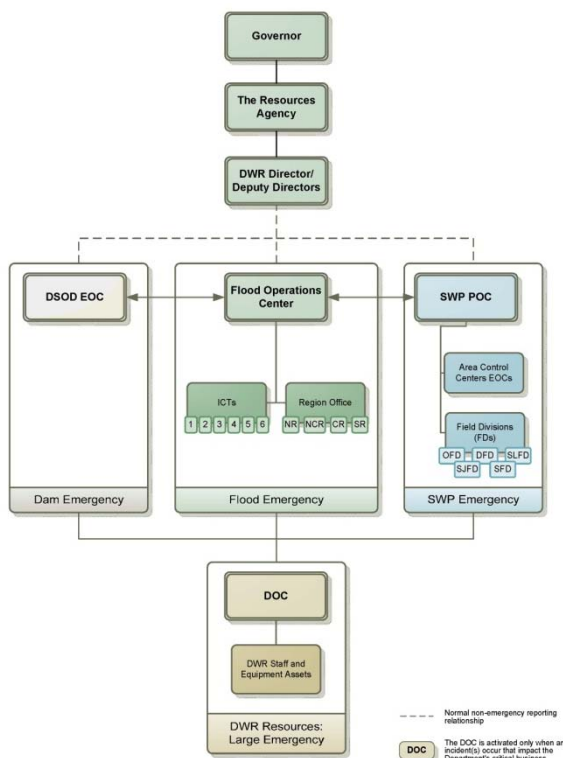
Standby contracts are being developed to ensure contractor resources are readily available to aid in response and recovery from Delta flood emergencies. These contracts will secure a variety of services including breach stabilization and closure, levee slope armoring, construction materials and flood fight supplies furnishing, barge operation, facility operation, etc.

**STATUS:** Draft emergency contract specifications to be completed May 2013.

### ➤ FLOOD FIGHT MATERIALS

DWR flood fight supplies continue to be purchased and stored in the Delta region at warehouses in West Sacramento and Stockton.

**STATUS:** 485,00 sandbags, 9.5-miles of plastic, 2,800-rolls of twine, 72,000 stakes, 250,000 buttons, 12 roll-off containers, 225,000-tons of rock.



## DWR'S EMERGENCY MANAGEMENT PLAN

The DWR Delta Flood Emergency Management Plan will describe Department-wide preparedness, response, and recovery actions for Delta flood emergencies ranging from complex, multiple failure incidents affecting many Delta islands to an isolated, one-island incident. The plan will prescribe the Department's concept of operations for Delta flood emergencies, describing roles and responsibilities of Department organizations under SEMS including; the Flood Operations Center (FOC), the SWP Project Operations Center – (POC), and the Department Operations Center (DOC). The plan will support the Department's emergency preparedness efforts in the Delta, describe Department actions during flood emergency response, and guide Department flood emergency managers in making critical decisions during recovery.

**STATUS:** Administrative Review Draft to be completed May 2013.



## LOCAL PREPAREDNESS SUPPORT

Two types of grant programs specific to the Delta are being offered to improve local emergency response capabilities including enhancing local emergency response plans, stockpiling flood fight materials and equipment, training and exercises, and additional critical improvements. DWR recently awarded \$5M for the Delta Communications Grant to the five Delta counties and Bethel Island. Delta ER Grants will be made available in 2013 with funding of \$5M initially and up to an additional \$15M by 2017 depending on applicant response.

**STATUS:** All 5 counties have executed contracts with DWR for the Delta Communications Grant. PSP for Delta ER Grant to be released in 2013.

## PROGRAM SCHEDULE AND BUDGET

